

U Series

Simply laser marking



Developed to your needs



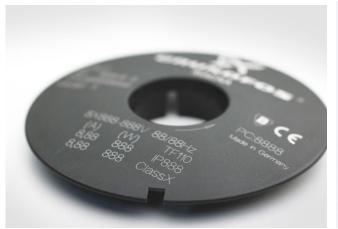






Precise marking - even with the smallest font sizes

Marking in recesses thanks to long focus distance



Permanent marking by colour-change of plastics



Marking individual pieces

With the U Series laser markers you can mark individual single pieces, as well as small and medium batches quickly and easily. Thanks to the virtually maintenance-free fiber laser source, plastic can be recoloured and metal permanently marked directly - without the use of sprays or pastes.

No matter if its data matrix codes, serial numbers or small fonts - with the U Series laser markers, job shops and machine builders are able to easily mark components, type plates or tools - even in hard-to-reach areas. The permanent marking of max. 190 x 190 mm enables complete traceability. Advertising materials, such as pens or USB sticks, can be individually marked with logos or names.

The U300 is a class 2 laser desktop workstation, so no safety precautions are required. The U50 - an open system of laser class 4 - can be positioned at will and thus also marks larger or bulky components. Variable data - no matter whether it's codes, consecutive numbering or names - can be lasered onto your workpieces quickly thanks to UMark software. The intuitive marking software is easy to use. The U Series products are equipped with high-quality optical elements and scanners - both components ensure precisely marked parts. The U Series was developed and manufactured by Trotec. We adhere to stringent regulations regarding production processes and European manufacturing standards. With 68 locations in 18 countries, we have the largest service and training network in the industry. In addition, our dealer network includes 113 partner companies worldwide.

Features and Options





Process dynamic data quickly and efficiently

The UMark software enables you to mark your information on the object in no time at all. This allows you to generate codes, import data files or graphics, and create text.

The software also has a material database so you can mark with the correct parameters as quickly as possible. You can also add your own parameters to this database.



Save time with border marking

A special feature of the U Series is the Border marking function - this allows you to project the surface to be marked or even the contour onto the



component at any time, position it in real time and, if necessary, correct it with a mouse click.





Best engraving quality thanks to exceptional optics

High-quality lenses and an excellent laser spot guarantee a perfect application result for your marking. This allows even the smallest details to be marked precisely. Functions such as polishing and deep engraving ensure legibility even on demanding materials.

Independent and flexible through Ethernet

Due to the newly integrated interface, the laser can be controlled with any Windows PC. This means that you are no longer tied to the functionality of an Industrial PC. Simply plug in and laser - you will be surprised how much time you will save!





Stay safe and productive

The marking laser works only when the door of the U300 is closed. The reason for laser class 2 is the inbuilt positioning laser that allows you to align your work materials quickly and easily. This means that no special protective devices are required - the operator can work safely at all times.

Better environments with Atmos exhaust systems

Trotec is also setting new standards in exhaust systems with the Atmos series. As the only laser manufacturer, we produce models that are optimally adapted to the respective laser machine. A suitable exhaust system ensures the safe and clean operation of your laser machine. It reliably removes dust and gases from the processing area and, with its activated carbon filters, it filters out odours that may be generated during laser processing. The Atmos exhaust system helps to deliver the best possible marking quality. We recommend the Atmos Nano for the combined use of a U marker with exhaust system.

Applications and Materials

The laser machines of the U Series can be used to mark countless metals and plastics. In detail, plastics are re-coloured or foamed, metals (deep) engraved or surfaces polished to ensure the best possible legibility and 100% traceability.

Metals suitable for laser engraving and marking:

- · Stainless steel
- · Steel and hard metals
- · Aluminium and anodised aluminium
- · Precious metals
- Brass
- Copper
- Titanium and titanium alloys
- Other metals













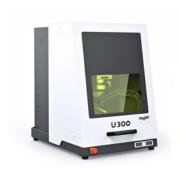




Plastics that are suitable for laser marking:

- Polyamide (PA)
- Polycarbonate (PC)
- Polyoxymethylene (POM)
- Polyarylsulfones (PSU, PPSU)
- Polyetheretherketone (PEEK)
- Acrylonitrile butadiene styrene copolymer (ABS)
- · Polyimide (PI)
- Polymethylmetacrylate (PMMA)
- Polyester (PES)
- Silicone

Technical Data





	U300 02F F160	U300 02F F254	U50 02F F160	U50 02F F254
Working area	120 x 120 mm	190 x 190 mm	120 x 120 mm	190 x 190 mm
Working distance (+/-0.2mm)			211.6 mm	361.6 mm
Loading area	350 x 400 mm		-	-
Max. height of workpiece	171 mm	22 mm	-	-
Max. loading weight	25 kg		-	-
Max. marking speed	6 m/s	9.5 m/s	6 m/s	9.5 m/s
Max. positioning speed	12 m/s	19 m/s	12 m/s	19 m/s
Z-axis	Software-controlled servo axis			
Door	Manual			
System requirements	Windows compatible PC at least 1GHz and Windows 10, CD-Tray, Ethernet interface			
Supported fonts	All installed TrueTypeFonts			
Supported 1D barcodes	Australian Post; Codebar; Code 11; Code 128; Code 39; Code 93; DAFT; Deutsche Post; DPD; EAN-13; EAN-14; EAN-8; GS1; HIBC; ISBN; GS1; Pharmacode			
Supported 2D codes	Datamatrix; QR-Code; Aztec; Codeblock-F; GS1 Databar; HIBC; Maxi Code; PDF 417			
Supported image formats	BMP; JPG; DXF; PDF; EPS; PS; TSF; DWG			
Interfaces	Ethernet; Laser-Interlock; Marking-Start, (24 VDC)			
Dimensions (L x D x H)	445 x 851 x 653 mm 120 x 643 x 110 mm			
Weight	56 kg 8 kg		kg	
Weight laser rack	20 kg			

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